

WYSOCKA, Felicjz; UMIŃSKI, Jersy

Specificity of complement fixation reaction with toxoplasmosis antigen; Toxoplasma and Sarcosporidia. Med.dow.mikrob. 7 no.4: 393-397 1955.

1. Z Instytutu Medycyny Pracy i Higieny Wei w Lublinie. Dyrektor: prof.dr J. Parnas. i z Zakładu Parazytologii. Kierownik: doc. dr. F. Wysocka.

- (SARCOSPORIDIOSIS, immunology,
complement fixation with Sarcosporidia antigen)
- (TOXOPLASIOSIS, immunology,
complement fixation with Toxoplasma antigen)
- (COMPLEMENT,
fixation with Sarcosporidia & Toxoplasma antigen)

WYSOCKA, F.; DOBRZANSKA, A.; UMINSKI, J. (Lublin)

Toxoplasmosis in children with developmental defects in the Lublin region. Wiadomosci parazyt., Warsz. 2 no. 5 Suppl: 37-38 1956.

1. Zaklad Parazytologii Inst. Med. Pracy i Hig. Wsi i Klinika Pediatriczna AM.

- (TOXOPLASMOSIS, in infant and child,
in ment. & physical defects, statist. in Poland (Pol))
- (ABNORMALITIES, statistics,
toxoplasmosis in child. with ment. & physical defects,
statist. in Poland (Pol))
- (MENTAL DEFICIENCY, statistics,
same)

WYSOCKA, F.; BARTOSZEWSKI, A.; UMINSKI, J. (Lublin)

Toxoplasmosis in obstetric material in the Lublin region.
Wiadomosci parazyt., Warsz. 2 no.5 Suppl:39-40.1956..

1. Zaklad Parazytologii Inst. Med. Pracy i Hig. Wsi i Klinika
Ginekol.-Poloz. AM.

(TOXOPLASMOSIS, in pregnancy,
statist. in Poland (Pol))

(PREGNANCY, in various diseases,
toxoplasmosis, statist. in Poland (Pol))

EXCERPTA MEDICA Sec 4 Vol. 10/9 Microbiology Sept 57

2189. UMIŃSKI J. Zakł. Parazytol. Inst. Med. Pracy i Hig. Wsi, Lublin. *Próby otrzymywania surowicy odpornościowej przeciwtoksomplazmowej na królikach. Attempts to obtain antitoxoplasma sera from rabbits
WIAD. PARAZYTOL. 1956, 2/5 suppl. (45-47)

Preliminary report on attempts to obtain antitoxoplasma sera from rabbits. The rabbits were infected and reinfected with a suspension of toxoplasma (Rh strain) fully virulent, attenuated and killed. Some of them were treated with antibiotics, sulphonamides and vit. C. Killed antigens do not seem to produce antibodies or contribute to immunize against reinfections. The production of antibodies was controlled with CFT. The administration of antibiotics had no special effect on the titre of antibodies.
Wysocka - Lublin

EXCERPTA MEDICA Sec 4 Vol. 10/9 Microbiology Sept 57

2190. UMIŃSKI J. Zakł. Parazytol. Inst. Med. Pracy i Hig. Wsi, Lublin. *Ocena różnych antygenów toksoplazmowych używanych do odczynu wiązania dopełniacza. Evaluation of various toxoplasma antigens for the CFT WIAD. PARAZYTOL. 1956, 2/5 suppl. (47-49)

Preliminary remarks on the evaluation of various toxoplasma antigens for the CFT, produced on laboratory scale. The result of this reaction as regards both the height of the titre and the extent to which the haemolysis is stopped, depends on the kind of antigen applied. The durability of various antigens is not the same. The purpose of the research which is still in progress, is to find the most suitable antigen for routine diagnosis.

Wysocka - Lublin

UMIŃSKI, J.

WYSOCKA, F.; BARTOSZEWSKI, A.; UMIŃSKI, J.; ZBOJA, W.

Toxoplasmosis in material of the Gynecological-Obstetric Clinic
of the Medical Academy in Lubin. Gyn. polska 28 no.2:231-237
Mar-Apr 57.

1. Z Zakładu Parazytologii Instytutu Medycyny Pracy i Higieny
Wsi w Lublinie Kierownik: doc. dr. F. Wysocka i z I Kliniki
Ginekologiczno-Położniczej A.M. w Lublinie Kierownik: prof. dr.
S. Liebhart.

(TOXOPLASMOSIS, statist.
gyn-obst. hosp. (Pol))

UMIŃSKI, J.

LOBRZAŃSKA, A.; UMIŃSKI, J.

Harmful effect of intestinal lamblia on the health of children.
Pediat. Polska 32 no.7:797-802 July 57.

I. S. Zakładu Parazytologii Instytutu Medycyny Pracy i Higieny
a. Instrukcje Kierownik: doc. dr med. F. Wysocka i z Kliniki Pediatrii
A. M. w Bibliotek Kierownik: doc. dr. med. W. Kłopot. Zakład
ul. Staszica 11, Klinika Pediatrii A. M.

- (GIARDIASIS, in inf. & child
meaning, origin & weight loss (1957))
- (AMEBIA, in inf. & child
importance of infection (1957))
- (GIARDIASIS, in inf. & child
clinical picture & treatment (1957))

DOBRZANSKA, A.; MIERZEJEWSKI, T.; UMINSKI, J.

Electrophoretic studies on blood proteins in toxoplasmosis. Wiadomosci parazyt., Warsz. 4 no.5-6:401-402; Engl. transl. 403 1958.

1. Z Klin. Pediatrycznej Ak. Med., Zakladu Chemii Fizjolog. WSR. i Zakladu Parazytologii IMPW w Lublinie.

(TOXOPLASMOSIS, blood in,
proteins, electrophoresis (Pol))

(BLOOD PROTEINS, in var. diz.
toxoplasmosis, electrophoresis (Pol))

EXCERPTA MEDICA Sec 4 Vol 12/9 Med. Micro. Sept 59

2912 FURTHER ATTEMPTS TO PRODUCE TOXOPLASMA-IMMUNE SERUM
IN RABBITS - Dalsze próby otrzymywania toksoplazmowej surowicy od-
pornościowej na królikach - Umiański J. and Tog. Luty S. Zakl.
Parazytol. Inst. Med. Pracy (Rig. Wst. Lublin - WIAO. PARAZYT. 1958,
4/5-6 (415-416)

As antigens for the immunization of rabbits, mouse peritoneal exudate dried for
24 hr. at 37° C., fresh suspensions of liver, peritoneal exudate attenuated at
room temperature, and peritoneal exudate inactivated at 56° C. for 30-60 min.
were used. Antitoxoplasma immune serum of high titre could be prepared by re-
peated i. p. administration of mouse peritoneal exudate inactivated at 56° C. for
60 min., in 4-ml. doses.

BARTOSZEWSKI, A.; TOS-LUTY, S.; UMINSKI, J.; SIKORSKI, R.

Toxoplasmosis according to data of the gynecological and obstetric clinic of the Academy of Medicine in Lublin; preliminary report. *Wiadomosci parazyt.*, Warsz. 4 no.5-6:423; Engl. transl 423-424 1958.

1. Z Kliniki Ginekol.-Polozn. Ak. Med. I Zakladu Parazytologii IMPHW w Lublinie.

(PREGNANCY, compl.

toxoplasmosis, hosp. statist. (Pol))

(TOXOPLASMOSIS, in pregn.

hosp. statist. (Pol))

UMINSKI, Jerzy; STROCZYNSKA, Maria

Examination of small mammals for trichinosis in the county of Tomaszow Lubelski. Wiadomosci parazyt. 6 no.4:309-310 '60.

1. Z Zakladu Parazytologii Wiejskiej Instytutu Medycyny Pracy i Higieny Wsi, Lublin, Polska.
(TRICHINOSIS epidemiol)

BARTOSZEWSKI, Adam, dr.; SIKORSKI, Radzislaw; STROCZYNSKA, Maria; TOS-LUTY, Sabina; UMINSKI, Jerzy, dr.

Statistical presentation of results of the complement fixation test in toxoplasmosis. Acta parasit Pol 8 no.21/32:451-460

1. The I Clinic of Diseases of Women and Gynecology, Medical Academy in Lublin. Director: Liebhart, Stanislaw, dr. (for Bartoszewski and Sikorski). 2. Department of Rural Parasitology, Institute of Rural Medicine and Hygiene, Lublin. Director: Uminski, Jerzy, dr. (for Stroczyńska, Tos-Luty, Uminski).

~~UNINSKI, J.~~ [Uninski, J.]; TOS'-LYUTY, Sabina [Tos-Luty, S];
STROGINSKAYA, Mariya [Stroginska, M.]

Results of some investigations of rural parasitology. Med.
paraz.i paraz.bol. 29 no.5:532-537 S-0 '60.

(MIRA 13:12)

1. Iz otdela parazitologii Instituta meditsiny truda i gigiyeny
sela Ministerstva zdravookhraneniya P.N.R. (Pol'sha) (dir.
instituta - prof. Fuzef Farnas).
(PUBLIC HEALTH, RURAL) (PARASITES--MAN)

WAWRZKIEWICZ, J.; UMINSKI, J.

Tests on farm-reared foxes for detection of toxoplasmosis. *Wiadomosci parazyt.* 7 no.2:407-409 '61.

1. Katedra Mikrobiologii Wydz. Wet. W.S.R., Katedra Parazytologii Wiejskiej I.M.P.H.W., Lublin.

(CARNIVORA dis) (TOXOPLASMOSIS diagn.)

UMINSKI, Jerzy; PIETRZYK, Jan

Results of studies by means of the complement fixation test on toxoplasmosis in apes. Wiadomosci parazyt. 7 no.2:411-412 '61.

1. Zaklad Parazytologii Wiejskiej I.M.P.H.W. i Zaklad Produkcji Szczepionki "Polio" Wytworni Surowic i Szczepionek, Lublin.

(TOXOPLASMOSIS diagn) (APES dis) (COMPLEMENT)

UMINSKI, Jerzy; TOS-LUTY, Sabina; STROCYNSKA, Maria; BAZYLSKA, Danuta

Studies on the animal toxoplasmosis reservoir by means of the complement fixation test. Wiadomosci parazyt. 7 no.2:413-416 '61.

1. Zaklad Parazytologii Wiejskiej I.M.P.H.W., Lublin.

(TOXOPLASMOSIS immunol) (COMPLEMENT)

DOBRZANSKA, Alina; UMINSKI, Jerzy

The effect of *Toxoplasma gondii* infection (RH strain) on leukocytosis and leukograms of experimental animals. *Wiadomosci parazyt.* 7 no.2:417-418 '61.

1. Katedra Histologii i Embriologii Akad. Med. w Lublinie Zaklad Parazytologii I.M.P.H.W., Lublin.

(TOXOPLASMOSIS exper) (LEUKOCYTOSIS physiol)
(LEUKOCYTE COUNT physiol)

UMINSKI, Jerzy; GABINIEWICZ, Maria; STROCZYNSKA, Maria

Further studies on the complement fixation test with *Toxoplasma* antigen. *Wiadomosci parazyt.* 7 no.2:419-420 '61.

1. Zaklad Parazytologii Wiejskiej I.M.P.H.W., Lublin.

(COMPLEMENT) (TOXOPLASMA immunol)

UMINSKI, Jerzy; WAWRZKIEWICZ, Janusz

Preliminary results of studies on the use of the precipitation reaction in a gel medium for the diagnosis of toxoplasmosis. Wiadomosci parazyt. 7 no.2:421-424 '61.

1. Zaklad Parazytologii Wiejskiej I.M.P. i H.W. w Lublinie Katedra Mikrobiologii Wydz. Wet. W.S.R., Lublin.

(TOXOPLASMOSIS diagn)

TOS-LUTY, Sabina; UMINSKI, Jerzy; STROCZYNSKA, Maria

Studies on toxoplasmosis found in workmen in slaughterhouses,
tanneries and in the rural population. Wiadomosci parazyt. 7 no.2:
445-447 '61.

1. Zaklad Parazytologii Wiejskiej I.M.P.H.W., Lublin.

(TOXOPLASMOSIS statist)
(OCCUPATIONAL DISEASES statist)

STRODZYNSKA, Maria; SIKORSKI, Radzislaw; UMINSKI, Jerzy

Trichomoniasis in rural environment. Wiadomosci parazyt. 7 no.2:
453-456 '61.

1. Zaklad Parazytologii Wiejskiej Inst. Med. Pracy i Hig. Wsi i I
Klinika Chorob Kobietych i Poloznictwa A.M., Lublin.

(TRICHOMONAS INFECTIONS statist)

STROCZYNSKA, Maria; UMINSKI, Jerzy

Studies on the soil for the presence of geohelminths. Wiadomosci
parazyt. 7 no.2:491-493 '61.

1. Zaklad Parazytologii Wiejskiej Instytut. Med. Pracy i Hig. Wsi,
Lublin.

(SOIL parasitol) (HELMINTHS)

UMINSKI, Jerzy; CHRZASTEK-SPRUCH, Hanna; STROCZYNSKA, Maria

Medical and parasitological focus examination of country children
in the Lublin Province area. Wiadomosci parazyt. 7 no.2:495-498 '61.

1. Zaklad Parazytologii Wiejskiej Inst. Med. Pracy i Hig. Wsi,
Klinika Chorob Dzieci A.M., Lublin.

(HELMINTHIASIS statist)

UMINSKI, J.

Studies on toxoplasmosis in the Lublin center. Wiadomosci parazyt.,
7 no. 6:888-893 '61.

1. Zaklad Parazytologii Wiejskiej Instytutu Med. Pracy i Higieny
Wsi Lublin.

(TOXOPLASMOSIS prev & control)

CHYZASTEK-SPRUCH, Hanna; STROCZYNSKA, Maria; SZAJNER-MILART, Irena,
UMINSKI, Jerzy.

Morphological picture of the peripheral blood of rural children
infected with parasites of the digestive system. Wiad. parazyt.
9 no.6:535-543 '63

1. I Klinika Pediatria AM, Lublin, i Zaklad Parazytologii
Wisjskiej Instytutu Medycyny Pracy i Higieny Wsi im. Witolda
Chodzki, Lublin.

*

STROCYNSKA, Maria; SIKORSKI, Radzislaw; UMINSKI, Jerzy

Examination of women for *Trichomonas vaginalis* in rural foci of infection. *Wiad. parazyt.* 10 no.1:33-40 '64.

1. Zaklad Parazytologii Wiejskiej Instytutu Medycyny Pracy i Higieny Wsi i Klinika Chorob Kcięcych i Poloznictwa Akademii Medycznej, Lublin.

OWIARKA, Marian; UMIŃSKI, Jerzy; TOSIŃTY, Sabina

Studies on immunobiochemical sera of white rats with experimental *Toxoplasma gondii* infection. Wiad. parazyt. 10 no.4:308-310 '64

1. Zakład Antropozoonoz i Zakład Parazytologii Wiejskiej Instytutu Medycyny Pracy i Higieny Wsi, Lublin.

TOS-LUTY, Sabina; CHRZASTEK-SPRUCH, Hanna; UMIŃSKI, Jerzy

Studies on the frequency of a positive toxoplasmosis reaction
in mentally deficient, deaf, and normally developed children.
Wiad. parazyt. 10 no.4:374-376 '64

1. Zakład Parazytologii Wiejskiej Instytutu Medycyny Pracy i
Higieny Wsi, Lublin, i Klinika Pediatria Akademii Medycznej,
Lublin.

UMINSKI, Jerzy; STROCZYNSKA, Maria

Studies on the focal incidence of toxoplasmosis and trichinosis
in the Ilawa region. Wiad. parazyt. 10 no.4:377-380 '64

1. Zaklad Parazytologii Wiejskiej Instytutu Medycyny Pracy i
Higieny Wsi, Lublin.

TOS-LUTY, Sabina; MIERZEJEWSKI, Jerzy; UMINSKI, Jerzy

Studies on toxoplasmosis in dogs examined by means of complement fixation and intracutaneous tests. Wlad. parazyt. 10 no.4:385-386 '64

1. Instytut Medycyny Pracy i Higieny, Lublin, i Ośrodek Badawczy Służby Weterynaryjnej, Puławy.

UMINSKI, Jerzy; STROCYNSKA, Maria; WREBIAKOWSKI, Henryk; CHRZASTEK-
SPRUCH, Hanna.

Further studies on the incidence of intestinal parasites in the
Lublin region. Wiad. parazyt. 10 no.4:399-400 '64

1. Zakład Parazytologii Wiejskiej Instytutu Medycyny Pracy i
Higieny Wsi, Lublin, i Klinika Pediatria Akademii Medycznej,
Lublin.

UMINSKI, Jerzy

Studies on the hemagglutination test in the diagnosis of toxoplasmosis.
Acta parasit Pol 12 no.30/39:379-396 '64.

1. Department of Rural Parasitology of the Institute of Occupational
Medicine and Rural Hygiene, Lublin.

UMINSKI, J.

Studies on the incidence of toxoplasmosis in Poland. Wiad.
parazyt. 11 no.1:147-159 '65.

1. Instytut Medycyny Pracy i Higieny Wsi, Lublin.

KURZAWA, Wieslaw, mgr inz.; UMINSKI, Stanislaw, mgr inz.

Concrete coated basin serving as catch basin. Gosp wodna 23
no.7:258-259, 260 JI '63.

BRITNSKI, J.

BRITNSKI, J.

POLYID/Chemical Technology. Chemical Products and Their
Application. Lacquers. Paints. Coatings.

ii-30

Abs Jour: Ref Zhur-Khim., No 2, 1959, 6641.

Author : Jedlinski, Zb.; Umiński, T.

Inst :

Title : Effect of Triphenylmethyl and Benzoyl Peroxide on Poly-
merization and Drying of Linseed and Tung Oils.

Orig Lab: Przem. chem., 1957, 13, No 7, 401-405.

Abstract: It was found as the result of the study of the effect
of hexaphenylethane (I) (which dissociates in C_6H_6
solution producing free triphenylmethyl radicals) and
benzoyl peroxide (II) on the drying processes of lin-
seed (LO) and tung (TO) oils, that the Pb-Mn sicca-
tives (III) reduce the time of drying of LO at normal

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FOIHD/Chemical Technology. Chemical Products and Their
Application. Lacquers, Paints, Coatings.

11-30

Abs Jour: Ref Zhur-Khim., No 2, 1959, 6641.

temperature approximately to a fifth as compared with a control sample (which contains no III). No further reduction of the drying time of LO occurs, if, besides III, 2% of I would also be added; at a dosage of 0.1 to 0.2% of I or 1% of II in the absence of III, the drying time of LO as compared with the control sample, decreases only insignificantly (to 1/1.3 - 1/1.7); an addition of III to LO decreases the drying time to a 17th as compared with the control sample, and an addition of I in the amount of 0.2, 1, 2 and 4% decreases the drying time of LO to 1/2.5, 1/52, 1/104 and 1/156 respectively (the introduction of 1% of II decreases the drying time to 1/7). In contrast to samples containing III, EM with I produces a transparent film.

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POLYID/Chemical Technology. Chemical Products and Their
Application. Lacquers. Paints. Coatings.

H-30

Abs Jour: Ref Zhur-Khin., No 2, 1959, 6641.

without creases and patterns characteristic of T0, which indicates a uniform progress of polymerization in the whole layer of oil under the influence of free radicals. I and II not only do not enhance the polymerization of LO (250^o, viscosity control), but even retard it noticeably, and they enhance the polymerization of TM although to a lesser degree than the drying of T0. The conclusion is made that contrary to LO, the basic part in the process of drying of T0 is played by the diene reaction developing with the aid of free radical and having the character of a chain reaction; the lesser efficiency of I and II at the polymerization of T0 is explained by their partial decomposition due to elevated temperature and traces of water in oil.

Card : 3/4

POLYMER/Chemical Technology. Chemical Products and Their
Application. Lacquers, Paints. Coatings.

H-30

Obs Sour: Ref Zhur-Kol., No 2, 1959, 6641.

The slowing down of the polymerization of MO in the presence of I and II is caused, as it seems, by the inhibiting action of products of dissociation of I and II.
I. Resin.

Card : 4/4

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POLJND/Chemical Technology. Chemical Products and Their
Applications. Lacquers. Paints. Coatings.

H

Abs Jour: Ref Zhur-Khim., No 8, 1959, 29647.

Author : Jedlinski, Z. and Uliniski, T.

Inst :

Title : The Effect of Free Radicals on the Mechanism of
the Polymerization of the Glycerides in Tung Oil.

Orig Pub: Roczniki Chem, 31, No 3, 1053-1055 (1957) (in Polish
with an English summary)

Abstract: The effect of the nature of the catalyst (C) used
on the drying of tung oil (TO) has been investigated.
The following were used as C: hexaphenylethane (I),
benzoylperoxide (II), and Pb and Mn driers. Data
are presented on the drying rate (D) of TO and of

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POLAND/Chemical Technology. Chemical Products and Their Applications. Lacquers. Paints. Coatings.

11

Ibs Jour: Ref Zhur-Khin., No 8, 1959, 29647.

linseed oil containing 0.02-1.3-4% (I), 1% II, 0.45% Pb, and 0.12% Mn. When the concentration of I, which decomposes readily in solution with the formation of free radicals (FR), is increased, a sharp increase in D is observed, indicating the chain character of the polymerization of TO. It is suggested that in the presence of FR, which activate the diene groups of the glycerides of eleostearic acid, the latter enter Diels-Alder reactions with the glycerides of other unsaturated acids, resulting in the simultaneous drying of all the layers in the film, including the bottommost layers which are practically deprived of contact with O_2 . This assumption is confirmed by the fact that the TO on

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ICLND/Chemical Technology. Chemical Products and Their
Applications. Lacquers. Paints. Coatings.

II

Ibs Jour: Ref Zhur-Khin., No 8, 1959, 25647.

drying in the presence of I forms a smooth lustrous
film rather than a mat reticular film, characteristic
of unadulterated TO. TO to which II or III [sic] has
been added dries to form the usual finely crystalline
opaque film. -- M. Barkova.

Card : 3/3

TASCHNER, E.; KUPRYSZEWSKI, G.; UMINSKI, T.; BOROWSKI, K.

Investigations on the mechanism of the N-transacylation reaction
by means of ^{14}C labelled acetic acid. *Bul.Ac.Pol.chim.* 7 no.12:
867-869 '59. (KRAI 9:5)

I. Department of General Chemistry, Technical University, Gdanck.
II Department of Physics, Technical University, Gdansk.
(Acylation) (Acetic acid) (Carbon) (Radioisotopes)

TASCHNER, E.; WASIELEWSKI, C.; KUPRYSZEWSKI, G.; UMINSKI, T.

Investigations on the reaction mechanism of O-acidolysis by means of
 ^{14}C acetic and propionic acids. Bul.Ac.Pol.chim. 7 no.12:873-875 '59.
(KAI 9:5)

(Acetic acid) (Propionic acid) (Hydrolysis)
(Carbon) (Radioisotopes)

85194

P/014/60/039/002/001/002
A221/A026

21.6200

1403

AUTHORS: Jedliński, Zbigniew, Hippe, Zdzisław and Umiński, TadeuszTITLE: Influence of Gamma Radiation¹⁹ and Neutrons on Laquer¹⁹ CoatingsPERIODICAL: Przemysł Chemiczny 1960, Vol. 39, No. 2, pp. 110-112

TEXT: This article is the first of a series. As a preliminary work, the authors investigated the influence of gamma radiation and of neutrons on protective coatings of various film forming materials, like chlorinated rubber, chlorinated polyvinyl chloride, polyvinyl butyral, co-polymer of vinyl chloride and isobutyl ether of polyvinyl alcohol, alkyd resin, phenol-formaldehyde resin and polymerised linseed oil. Compositions of same are given in Table 1. Radiation time was 3 months (2,160 hours) at 10,800 r. Tests samples were ageing at normal temperatures if exposed to atmospheric conditions. Thoroughly cleaned test plates were coated twice at 24-hour interval. Twelve plates were coated with each laquer; 4 of them were irradiated, 4 were ageing in normal atmospheric conditions and 4 were examined at the beginning of the experiment for physico-chemical properties. Samples for irradiation were fastened to a regular 16-wall drum 26 cm in diameter, equidistant from the radiation source. In the center of the drum a platinum needle with 100 mg of Ra²²⁶₈₈, screened by beryllium was placed.

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8519L
P/014/60/G39/002/001/002
A221/A026

Influence of Gamma Radiation and Neutrons on Laquer Coatings

Because of the beryllium screening, apart from gamma rays, neutrons were also present. The whole setting was screened with 10-cm thick lead plates. At the beginning of the experiment and after 3 months of irradiation, the coating layer was examined for a) shock resistance, b) elasticity, and c) adhesion. Results of these investigations are given in Tables 2-3. It came out that coatings made of polyvinyl butyral, copolymer of vinyl chloride and isobutyl ether of polyvinyl alcohol, alkyd resin or polymerized linseed oil showed much better elasticity and shock resistance than respective samples ageing in normal atmospheric conditions. Irradiated samples of coatings made of chlorinated rubber, chlorinated polyvinyl chloride and phenol-formaldehyde resins have lost the elasticity and adhesion. There are 3 tables and 8 references: 1 German, 1 Polish and 6 English.

ASSOCIATION: Katedra Technologii Powłok Ochronnych Politechniki Śląskiej (Silesian Polytechnical Institute, Department of Protective Coating Technology) in Gliwice

Card 2/2

S/081/62/000/022/015/086
B144/B101

AUTHORS: Sokołowski, Janusz, Kupryazewski, Gotfryd, Umiński,
Tadeusz

TITLE: Use of compounds tagged with the radioactive carbon isotope C^{14} to study the conversion of N-glucosides. I. Exchange of acetyl groups in N-acetyl-N-2,3,4,6-tetra-O-acetyl-D-glucopyranosyl-p-aminoazobenzene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 153, abstract 22Zh12 (Roczn. chem., v. 36, no. 2, 1962, 215-221 [Pol.; summaries in Russ. and Eng.])

TEXT: Hydrolysis of N-acetyl-N-2,3,4,6-tetra-O-acetyl-D-glucopyranosyl-p-aminoazobenzene (I) leads to the formation of N-acetyl-N-D-glucopyranosyl-p-aminoazobenzene (II) and of a small quantity of N-D-glucopyranosyl-p-aminoazobenzene (III). The position of the acetyl group in I was determined on the basis of a study of the acyl exchange in I: the effect of $C^{14}H_3COOCOCH_3$ (IV) on I leads to an exchange of the N-acetyl

Card 1/2

Use of compounds tagged with ...

S/081/62/000/022/015/088
B144/B101

group. The mixture of 0.2 g I [m.p. 199-200°C, $[\alpha]_D^{17} + 32 \pm 3^\circ$ (c 0.402, chloroform)], 0.02 g $ZnCl_2$, and 0.5 ml IV (activity 0.01 mcu/ml) is kept for 4 hrs at 100°C; I with C^{14} (activity 748 imp/min per mmole) is obtained. The mixture of 0.2 g N-N-2,3,4,6-tetra-O-acetyl-D-glucopyranosyl-p-aminobenzene (V), 0.02 g $ZnCl_2$, and 0.5 ml IV is heated for 0.5 hr; I with C^{14} is obtained; yield 0.12 g (activity 1978 imp/min per mmole). To 107.7 mg I, produced from V, 36 mg $(CH_3)_2NH$ dissolved in 9.5 ml CH_3OH is added, the mixture is stirred for 9 hrs at 20°C, and a mixture of II (86%) and III ($10 \pm 4\%$) is obtained (the yield was determined by paper chromatography and by measuring the activity of the mixture). [Abstracter's note: Complete translation.]

Card 2/2

SOKOLOWSKI, Janusz; KUPRYSZEWSKI, Gotfryd; UMINSKI, Tadeusz

Application of isotopically labeled (^{14}C) compounds to studies on N-glycoside transformations. I. Exchange of acetyl groups in N-acetyl-N-2,3,4,6-tetra-O-acetyl-D-glucopyranosyl-N-p-azobenzylamine. Roczniki chemii 36 no.2:215-221 '62.

1. Department of Organic Chemistry, Normal School, Gdansk.

UMINSKI, T.

POLAND/General Division - Problems of Teaching.

A-7

Abs Jour : Ref Zhur - Biologiya, No 7, 10 April 1957, 25807

Author : Uminski, T.

Inst :

Title : Working with Hydras in the Laboratory.

Orig Pub : Biol. szkole, 1956, 9, No 1, 32-37

Abst : Information is provided on the ecology of hydras, along with instructions for their collection, raising, and the choice and planning of experiments with hydras in schools and in school biology clubs.

Card 1/1

UMINSKI, Tomasz

Revision of the Palaearctic forms of the genus *Discus* Fitzinger,
1833 (Gastropoda, Endodontidae). *Annales zool* 20 no.16:299-333
'62.

1. Institute of Zoology, University, Warsaw.

UMINSKI, Tomasz

Taxonomy of *Anguispira* (?) *marmorensis* (H.B. Baker, 1932)
with notes on the taxonomy of the genera *Anguispira* Morse
and *Discus* Fitsinger (Gastropoda, Endodontidae). *Annales*
zool. 21 no.9:81-91 '63

L 38164-66 EWT(m)/EWP(j)/T RM/DS

ACC NR: AP6019237

(A)

SOURCE CODE: UR/0364/66/002/003/0311/0318

AUTHOR: Misyuk, E. G.; Davtyan, O. K.; Sofronkov, A. N.; Uminskiy, M. V.

ORG: Odessa State University im. I. I. Mechnikov (Odesskiy gosudarstvennyy universitet)

TITLE: A study of electrode semiconducting catalyzers

SOURCE: Elektrokimiya, v. 2, no. 3, 1966, 311-318

TOPIC TAGS: electrode, semiconductor catalyst, lithium, nickel, oxide, electrochemistry, electric conductivity, defect structure, temperature dependence, lattice parameter, solid solution, activation energy, chemisorption

ABSTRACT: The effect of fluctuations in hole concentration on electroconductivity, lattice parameters and activation energies was studied in solid solutions of $Li_xNi_{1-x}O$. Equations are derived for the desorption and chemisorption of oxygen in $Li_xNi_{(1-x)}O$, and for the formation of hole complexes essential to semiconducting oxides. The above oxides were formed by reacting nickel and lithium carbonates with acetic acid and decomposing the resulting acetates in air at 600°C. In this way, oxide mixtures containing 10, 20, 30, 40 and 50 at % lithium were produced. The solid solutions were produced by heating the mixtures at 700, 800, 1000 and 1200°C. The concentration of Ni^{3+} , Li_2O and Li in the solid solutions are given for various Li starting concentrations ($[Li^+]_0$) and reaction temperatures. Lattice parameters varied linearly with

UDC: 541.135.52-44

Card 1/2

L 30166-00

ACC NR: AP6019237

formation temperature from 4.16 Å at 700°C to 4.18 Å at 1000°C. Electrical conductivity (σ), $[\text{Ni}^{3+}]$ content and $\sigma/[\text{Ni}^{3+}]$ are given as a function of formation temperature for test temperatures ranging from 20 to 500°C. Maxima always occurred at 900°C (formation temperature) and the maxima was found to increase with test temperature. Maxima also occurred for $[\text{Ni}^{3+}]$, plotted as a function of $[\text{Li}^+]_0$ at $[\text{Li}^+]_0 = 30\%$. Activation energies calculated for $[\text{Li}^+]_0 = 20\%$ ranged from 0.83 to 4.37 kcal/mol depending on the formation and test temperatures. The electrical conductivity depended on the activation energy, lattice parameter and jump frequency of the transition holes; thus it possessed an electron hole nature as well as an ionic one. The latter was the cause of hole complex dissociation and the dissociation of "inert" interstitial lithium oxides into ions. Orig. art. has: 6 figures, 2 tables, 10 formulas.

SUB CODE: 07,11/ SUBM DATE: 01Feb65/ ORIG REF: 004/ OTH REF: 006

Card 2/2 MLP

L 08396-67 EWP(m)/EWP(j)/EWP(t)/ETI IJP(c) DS/JD/HW/JG/RM
ACC NRI AP6031792 (A) SOURCE CODE: UR/0364/66/002/007/0791/0795

AUTHOR: Misyuk, E. G.; Davtyan, O. K.; Uminskiy, M. V. 58
P

ORG: Odessa State University imeni I. I. Mechnikov (Odesskiy gosudarstvennyy universitet)

TITLE: Study of semiconductor electrode catalysts. Part 5: Semiconducting properties of nickel and copper oxides due to the incorporation of potassium ion

SOURCE: Elektrokimiya, v. 2, no. 7, 1966, 791-795

TOPIC TAGS: metal oxide, semiconductor conductivity, copper compound, nickel compound, potassium compound

ABSTRACT: The object of the study was to determine the degree of incorporation of potassium oxide in NiO and CuO, associated with the formation of Ni³⁺ and Cu³⁺ holes, and to study the semiconducting properties of solid solutions thus obtained. The electric conductivity of the NiO-K₂O and CuO-K₂O systems was studied as a function of temperature. It was found that at certain initial concentrations of K₂O and certain temperatures, K₂O becomes incorporated in the crystal lattices of NiO and CuO. The increase in the electric conductivity of these systems is fairly considerable, despite small hole concentrations. It is shown that the electric conductivity is due to the mobility of holes (Ni³⁺ and Cu³⁺), and to the mobility of K⁺ and OH⁻ ions. In systems obtained at high initial concentrations of potassium, the electric conductivity appar-

Card 1/2

UDC: 541.135.4

I 08396-67

ACC NR: AP6031792

ently is exclusively ionic in nature. Orig. art. has: 4 figures and 4 tables.

SUB CODE: 07,20/ SUEM DATE: 01Feb65/ ORIG REF: 003

Card 2/2 afB

L 42159-66 EWP(j)/EWT(m)/T/EWP(t)/ETI LJP(c) RM/LS/JW/JD/CG

ACC NR: AP6022425

(A)

SOURCE CODE: UR/0364/66/002/004/0451/0456

AUTHOR: Misyuk, E. G.; Davtyan, O. K.; Uminskiy, M. V.ORG: Odessa State University imeni I. I. Mechnikov (Odesskiy gosudarstvennyy universitet)TITLE: Study of semiconductor electrode catalysts. Part 2: Dependence of the hole concentration and electrical conductivity of $\text{Li}_x\text{Cu}_{(1-x)}\text{O}$ solid solutions on the conditions of their formation

SOURCE: Elektrokimiya, v. 2., no. 4, 1966, 451-456

TOPIC TAGS: lithium oxide, copper compound, solid solution, hole conduction, HEAT OF FORMATION, SEMICONDUCTOR CONDUCTIVITY

ABSTRACT: $\text{Li}_x\text{Cu}_{(1-x)}\text{O}$ solid solutions with hole conduction, containing 10, 20, 30, 40, and 50 at. % lithium, were studied. A marked dependence of the hole concentration on the temperature of formation of the solid solution and on the initial lithium concentration was noted. Under optimum conditions, 5.6 at. % lithium becomes incorporated in the solid solution. The difference in the maximum incorporation of Li_2O in NiO and CuO is explained by the close similarity of the NiO and Li_2O lattices. The value of $\sigma/[\text{Cu}^{3+}]$ was calculated from electrical conductivity data, and found to increase in regular fashion with rising temperature of formation of the solid solution. In the range of 25-500°, the linear relationships $\log \sigma$, $1/T$ do not show any inflections, but this must not be construed to indicate the absence of mobile charges of different char-

Card 1/2

UDC: 541.135.4

L 42159-66

ACC NR: AP6022425

acter. Both hole and ionic conduction should take place in these solid solutions; however, it is impossible to distinguish these two types of conduction on the basis of the temperature dependence, since their activation energies are nearly the same. Orig. art. has: 8 figures and 3 tables. 10

SUB CODE: 07,20/ SUBM DATE: 01Feb65/ ORIG REF: 002/ OTH REF: 002

ms
Card 2/2

UINSKIY, Ye. A.

ANDRYUSHCHENKO, Yu.S., BAGIN, Yu.I., BASHKIRTSEV, A.A., BELEN'KOV, G.Ye.
BELINICHER, I.Sh., BUSHUYEV, N.M., VAGANOV, A.K., GASHEV, A.M.,
YBS'KOV, K.A., ZGIRSKIY, Ch.I., IGNAT'YEV, M.I., KORUSHKIN, Ye.N.
KUZ'MOV, H.T., PATSKEVICH, I.P., PICHAK, P.I., RAYSES, V.B.,
RUDAKOV, A.S., SAPRYKIN, V.M., SIDOROV, P.F., UINSKIY, Ye.A.,
KHANZHIN, P.K., CHEREMOVSKIY, Yu.I., BUSHUYEV, N.M., kand.tekhn.
nauk, red.; DUGINA, N.A., tekhn.red.

[Manual for agricultural machinery operators] Pt. 3. Stationary
internal combustion engines, steam engines and windmills. Rural
electrification. Mechanization of production in animal husbandry.
Spravochnik mekhanizatora sel'skogo khoziaistva. Pt. 3. Statsionarnye
dvigateli vnutrennego sgoraniia, lokomobili i vetrodvigateli.
Elektrifikatsia sel'skogo khoziaistva. Mekhanizatsiia proizvodstvennykh
protssessor v zhivotnovodstve. Pod red. N.M. Bushueva. Moskva,
Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry. 1957. 200 p.
(MIRA 11:9)

(Agricultural machinery)

UMINSKIY, Ye. A.

ANDRYUSHCHENKO, Yu. S.; BAGIN, Yu. I.; BASHKIRTSEV, A. A.; BELIN'KOV, G. Ye.;
 BELINICHIER, I. Sh.; BUSHUYEV, N. M.; VAGANOV, A. K.; GASHEV, A. M.;
 YES'KOV, K. A.; ZGIRSKIY, Ch. I.; IGAFI'YEV, M. I.; KORUSHKIN, Ye. N.;
 KUZ'MOV, N. T.; PATSKEVICH, I. R.; PICHAK, F. I.; PAYTSES, V. B.;
 HUDAKOV, A. S.; SAPRYKIN, V. M.; SIDOROV, F. F.; UMINSKIY, Ye. A.;
 KHANZHIN, P. K.; CHEREMOVSKIY, Yu. I.; YERAKHTIN, D. D., kand. tekhn.
 nauk, retsenzent; MAKAROV, M. P., inzh., retsenzent; TORBMYEV, Z. S.,
 kand. tekhn. nauk, retsenzent; POLKANOV, I. P., kand. tekhn. nauk,
 retsenzent; IGNAT'YEV, M. G., agronom, retsenzent; GUTMAN, I. M.,
 inzh., retsenzent; YERMAKOV, N. P., tekhn. red.; SARAFANNIKOVA, G. A.,
 tekhn. red.

[Reference manual for the agricultural machine operator] Spravochnik
 mekhanizatora sel'skogo khoziaistva. Pt. 2. [Repair of tractors and
 agricultural machinery] Remont traktorov i sel'skokhoziaistvennykh
 mashin. Pod red. N. M. Bushueva. Moskva, Gos. nauchno-tekhn. izd-
 vo mashinostroit. lit-ry. 1957. 335 p. (MIRA 11:9)
 (Agricultural machinery--Maintenance and repair)

UMINSKIY, Ye.A.
 ANDRYUSHCHENKO, Yu.S.; BAGIN, Yu.I.; BASHKIRTSEV, A.A.; BELEN'KOV, G.Ye.;
 BELINICHER, I.Sh.; BUSHUYEV, N.M.; VAGANOV, A.K.; GASHEV, A.M.;
 YMS'KOV, K.A.; ZGIBSKIY, Ch.I.; IGNAT'YEV, M.I.; KORUSHKIN, Ye.N.;
 KUZ'MOV, N.T.; PATSEVICH, I.R.; PICHAK, F.I.; RAYTSES, V.B.;
 RODAKOV, A.S.; SAPRYKIN, V.M.; SIDOROV, F.P.; -UMINSKIY, Ye.A.;
 KHANZHIN, P.K.; CHIKREMOVSKIY, Yu.I.; YERAKHTIN, D.D., kand.tekhn.nauk;
 retsenzent; MAKAROV, M.P., inzh., retsenzent; TORBEYEV, Z.S., kand.
 tekhn.nauk, retsenzent; POLKANOV, I.P., kand.tekhn.nauk, retsenzent;
 IGNAT'YEV, M.G., agronom, retsenzent; GUTMAN, I.M., inzhener, retsenzent;
 SARAFANNIKOVA, G.A., tekhn.red.; YERMAKOV, N.P., tekhn.red.

[Manual for agricultural mechanizers] Spravochnik mekhanizatora
 sel'skogo khoziaistva. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
 lit-ry. Pt.1. [Tractors and automobiles, agricultural machinery and
 implements, and operation of machine and tractor yards] Traktory i
 avtomobili, sel'skokhoziaistvennyye mashiny i orudiya, ekspluatatsiia
 mashinno-traktornogo parka. Pod. red.N.M.Bushueva. 1957. 462 p.
 (MIRA 10:12)

(Machine-tractor stations)

UMIRZAKOV, A. Cand Agr Sci - (diss) "Certain Problems of ^{dairy} ~~the~~ Standardization of the Feeding of ^{on farms of the} ~~Marsh~~ Cows ~~in the~~ Piedmont ^{to hills} of Alma-Atinskaya Oblast." Alma-Ata, 1957. 21 pp including cover, 20 cm. (Min of Agriculture USSR, "Alma-Ata Zooveterinary Inst), 100 ■■ copies (KL, 26-57, 111)

USSR / Farm Animals. Cattle

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12068

Author : Umirzakov A. U.

Inst :

Title : The Utilization of Corn Silage in the Rations of Dairy Cows (Ispol'zovaniye kukuruznogo silosa v rationsakh molochnykh korov)

Orig Pub: Tr. Alma-Atinsk. zoovet. in-ta, 1956, 9, 56-63

Abstract: When feeding rations with corn silage of 39.1 and 41.4% of the nutritive feed value, it was observed that the digestibility and utilization of the nutritive substances was higher than that in the rations with a content of 49.0 and 49.1% of hay and beet-root, and an equal amount of concentrates. The increase of the milk yield in the experimental groups was 0.7 and 1.7 kg. per cow as compared with the

Card 1/2

USSR / Farm Animals. Cattle

APPROVED FOR RELEASE: 04/03/2001

Q-2
CIA-RDP86-00513R001858010003-5

Abs Jour: Ref Zhur-Biol., No 3, 1958, 12068

Abstract: previous period. In the control groups, in one, there was a decrease of 0.4 kg., in another one, an increase of 0.9 kg. Experimental rations contained 1-1/2 to 2 times more carotene and were cheaper as compared with control ones.

Card 2/2

USSR/Farm Animals - Cattle

Q

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69271

Author : Umirzakov, U.

Inst : Alma-Ata Zooveterinary Institute

Title : Typification of the Nutrition of Milch Cows in the Farms
of the Foothill Zone of Alma-Atinskaya Oblast

Orig Pub : Tr. Alma-Atinsk. zoovet. in-ta, 1957, 10, 81-87

Abstract : The results of experiments showed that the inclusion,
into summer rations, of 40-50% of green corn and 20-25%
of alfalfa in relation to the nutritional value of the
ration exerts a positive influence upon the physiologi-
cal condition and milk production of cows.

Card 1/1

UMITRESCU,

SCHWARTZ, J.; MOSCOVICI, O.; CAJAL, N.; SAMUEL, J.; UMITRESCU, ;
ADERCA, I.

Changes in hemagglutinating properties in mortal cases of epidemic hepatitis during the period November 1954-April 1955. Stud.cercet. infremicrobiol., Bucur. 6 no. 3-4:413-418 July-Dec. 1955.

(HEPATITIS, EPIDEMIC, virus

hemagglutinating properties, changes in mortal cases of viral hepatitis during period November 1954-April 1955)

(HEMAGGLUTINATION

inhib. properties of viral hepatitis virus, changes in mortal cases during period November 1954-April 1955)

L 44100-66

ACC NR: AP6009354 (A,N) SOURCE CODE: CZ/0078/65/000/011/0016/0016

AUTHOR: Sunderhauf, Frantisek (Engineer; Prague); Umlasek, Josef
(Engineer; Slapanice u Brna) 35

ORG: none B

TITLE: Tubular wall for combustion chambers and boilers. CZ Pat.
No. PV 803-63

SOURCE: Vynalezy, no. 11, 1965, 16

TOPIC TAGS: combustion chamber, engine cooling system ~~engine~~

ABSTRACT: An Author Certificate has been issued for a gastight, tubular, panel wall designed for combustion chambers or boilers cooled by circulating water. It consists of tubes connected by special strips. The strips are bent parallel to the axes of the tubes and have protrusions which are perpendicular to the axes.

[KP]

SUB CODE: 21/ SUBM DATE: 13Feb63/

Card 1/1 *LL*

VONDRASEK, Vaclav, doc. inz.; UMLAUF, Karel, inz.

Effect of temperature and time on recrystallization of the hardenable Al-Mg-Si alloy. Sbor VSB Ostrava 10 no.3:385-394 '64.

1. Submitted May 7, 1963.

UMLAUF, R.

CZECHOSLOVAKIA

UMLAUF, R., MD; PREC, A., MD.

1. Surgical Ward of the Military Hospital (Chirurgické oddelení vojenské nemocnice), Ruzomberok; 2. Neurological Ward of the Military Hospital (Neurologické oddelení vojenské nemocnice), Ruzomberok (for all)

Prague, Praktický lékař, No 10, 1963, pp 371-374

"Our Experiences with Applied Acupunctures in the Present Complex Treatment."

UMLAUF, Richard, podplukovník, MUDr.; HŘÍČ, Antonín, podplukovník, MUDr.;
PÁVLÍK, Lubor, podplukovník MUDr.; ČIERNÝ, František, major
MUDr.

Acupuncture and its therapeutic importance. Voj. zdrav. listy
34 no.2:70-74 Ap '65.

1. Vojenská nemocnice Slovenského národného povstania, Ružomberok;
chirurgické oddelení (nacelník: podplukovník dr. Jan Kulhanek);
neurologické oddelení (nacelník: podplukovník dr. Antonín Prec);
a otorinolaryngologické oddelení (nacelník: podplukovník dr.
Lubor Pavlík).

UMLAUF, Z.

"Operating an inking device." P. 141.

PAPIR A CEJLŮSA. (Ministerstvo lesu a drevarského průmyslu). Praha,
Czechoslovakia, Vol. 13, No. 6, June 1958.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

UMLEV, M.I.

~~Using gastric juice for treating diseases in calves and small pigs.~~
Veterinaria 34 no.1:66-67 Ja '57. (MLRA 10:2)

1. Starshiy veterinarnyy vrach sovkhosa "Pervomayskiy."
Tarutinskogo rayona, Odesskoy oblasti.
(Gastric juice) (Calves--Diseases) (Swine--Diseases)

MILOVSKAYA, V.F.; ROMENSKIY, N.V.; UMLEVA, N.G.

Physical properties of the grain of certain varieties of wheat
from the southern Ukraine. Izv.vys.ucheb.zav.; pishch.tekh. no.1:
8-12 '60. (MIRA 13:6)

(Ukraine--Wheat)

TORZHINSKAYA, L.R.; ROMENSKIY, N.V.; UMLEVA, N.G.

Anatomy and morphology characteristics of wheat grain from the southern regions of the Ukraine. *Izv. vys. ucheb. zav.; pishch. tekhn. no.4:12-16 '63.* (MIRA 16:11)

1. Odesskiy tekhnologicheskii institut imeni Lomonosova, kafedra biokhimi i zernovedeniya.

UMNIATIN, M. B., ed.

Mekhanizirovannaya vybivka, oshistka i obrubka stal'nykh i chugunnykh otlivok.
[Mechanized knockout, scouring, and cleaning of steel and cast iron castings].
Moskva, Mashgiz, 1952. 106 p.

SO: Monthly List of Russian Acquisitions, Vol 6 No 4, July 1953

UMNIAKOV, I.I.; ALESKEROV, Yu.N., MIKHAYLOV, K.M.

[Samarkand; a concise reference guidebook] Samarkand; kratkii
spravochnik-putevoditel'. Tashkent, Gos.izd-vo Uzbekskoi SSR, 1956.
101 p. (MIRA 11:1)

(Samarkand--Description)

UMNIK, N. N.

USSR/Chemistry - Particles, Packing of
Chemistry - Granular Substances

Mar 49

"The Hydraulic Resistance and Packing Density of a Layer of Granulated Material,"
N. M. Zhavoronkov, M. E. Aerov, N. N. Umnik, Physicochem Inst imeni L. Ya. Karkov,
Moscow, 19 pp

"Zhur Fiz Khimii" Vol XXIII, No 3

Suggests and experimentally checks dependence of density of packed grains in a layer on ratio of diameters of container and grains. Measures hydraulic resistance of a layer of metal balls and catalyst tablets of various sizes in tubes of various diameters in the range $R = 2-800$. Offers equation linking coefficient of friction in granular layer with Reynolds criteria. Calculates coefficient of resistance of balls and cylinders in layer and cluster. Shows that ratio of speed of a gas in granular layer in center of layer and near wall of tube is approximately 1 : 1 for metal balls. Submitted 24 Mar 48

PA 38/4919

F

S

2060. MEASUREMENTS OF GAS VELOCITY IN AN ACTUAL GRANULAR BED.
Aerov, M. E. and Umik, N. N. (Zh. Priklad. Khim. (J. Appl. Chem.),
Oct. 1950, vol. 23, 1009-1017).

Equations are given for determining variations in gas velocity
across the cross section of a granular bed, such as in used in com-
bustion, contact catalysis, adsorption, chromatography and ion
exchange processes. A method is described for measuring these varia-
tions by treating the grains in a bed with lead acetate, adding
H₂S to the gas passing through, and measuring the advance of the front
of sorption of H₂S in the bed. With spherical grains and $Re < 40$,
velocity at the walls was 30-70% higher than in the centre of the
bed. Average fluctuations in velocity owing to variations in the
packing of the grains at different points were approximately $\pm 7\%$.

A 58-31A METALLURGICAL LITERATURE CLASSIFICATION

147000-01

INDEXED MAP ONLY ONE

11/11/50

FROM ROMANY

11/11/50 ONLY 111

S. H.
Sub. A

Sheet

536.23 : 536.25

9726. Phenomena of free convection in a granular stratum. M. E. ARSHV AND N. M. LITMAN. *Dokl. Akad. Nauk SSSR*, 124:3-50 (No. 11, 1951) in Russian.

Free convection currents are set up by temperature rises in granular strata filled with a gas of comparatively high specific gravity, and these lead to a considerable increase of the effective thermal conductivity of the granular layers. This phenomenon, discovered in 1936, is of a considerable importance for high-pressure processes, combustion in metallurgical furnaces, gas generators with coking shafts, and catalytic processes, where it is very important for the first sections of the catalytic converters with a high temperature gradient and concentration. However, this problem has not as far been treated quantitatively. The author's tentative relation between convection current and effective thermal conductivity of the granular stratum (under the simplifying assumption of the absence of a temperature gradient between gas flow and solid particles) based on equalizations of similitude, is successful in establishing the conditions of the occurrence of a convection current, and in the determination of its intensity as well as of the increase in the thermal conductivity owing to the convection current. The results are fully borne out by the experiments.

B. F. KRALJIC

SA
sect. A

Heat

596.22/23

5726. Coefficients of thermal conductivity in a granular stratum. M. E. ARMOR AND N. N. URSIN. Zh. Tekh. Fiz., 26, 1351-63 (No. 11, 1951) In Russian.

A method of determining the coefficient of thermal conductivity in a granular layer in which a gas or liquid flow exists is presented. The method works with temperature measurements on the axis of symmetry of the steady 2-dimensional heat flow. These measurements show the equality of the coefficients of conductivity along and across the gas flow. The coefficients of conductivity, neglecting radiation, for glass beads, gravel and catalytic substances in the form of spheres, tablets and Raschig rings were measured in the interval of Reynolds numbers $Re = 0.01-3000$ in flows of dry air, H₂, and CO₂. For badly conducting porous grains of spherical shape or tablets of insignificant roughness an empirical

relation, valid for the range $Re = 10-3000$, was found: $\lambda/\lambda_{gas} = 10.5 + 0.2RePr$, where $Pr = c_p/\lambda_{gas}$ is the Prandtl criterion for the gas penetrating the granular stratum. R. F. KRAUS

S.A.
sect. A

Heat

53624

5737. Heat exchange from pipes filled with a granular substance. M. E. ABRAM AND N. N. URSIN. Zh. Tekh. Fiz., 21, 1364-71 (No. 11, 1951) in Russian.

The heat exchange process from a pipe with a granular substance through which a gas flows is considered. The conception of a skin resistance to heat transfer at the pipe wall is introduced. A relation between the general heat exchange coefficient from the tube with a granular layer with the coefficient of thermal conductivity of the layer and the heat exchange coefficient at the tube wall was found. The relation determining, for gases of non-conducting material, the value of the exchange coefficient at the tube wall in the interval of Reynolds numbers 150-4000 takes the form $Nu_{wall}/Pr^{0.4} = 0.155 Re^{0.4}$, where Nu_{wall} is the Nusselt coefficient at the wall, Pr the Prandtl criterion.

B. V. KRAUS

Umnik, N. N.

✓ Coefficient of diffusion in granular layers. M. E. Acrov
and N. N. Umnik, *J. Appl. Chem. U.S.S.R.* 27, 253-60
(1954) (Engl. translation).—See *C.A.* 48, 9131a.
H. L. H.

①
MCT

UMNIK, N. N.

AID P - 3491

Subject : USSR/Chemistry
Card 1/1 Pub. 152 - 6/21
Authors : Aerov, M. E. and N. N. Umnik
Title : Determination of the velocity field in apparatus with granular layers and some regularities of modeling the movement of gas in the apparatus
Periodical : Zhur. prikl. khim., 28, 6, 602-607, 1955
Abstract : The movement of gases in a granular layer was determined over a range of Reynolds No. 30-3000. Hydraulic modeling in a granular layer is also discussed. The method may be applied to studying the movement of gas in industrial equipment. Eight drawings, 5 references, all Russian (1936-1952).
Institution : Physicochemical Institute im. Karpov
Submitted : D 8, 1953

UMNIK, N. N.

Mass transfer in the film rectification process. I. With streamline flow of the vapour. II. With turbulent flow. V. A. Malynov, N. N. Umnik, and N. M. Zhavoronkov (*Dokl. Akad. Nauk SSSR*, 1955, 105, 775-781, 1057-1059). — I. For rectification in columns with wetted walls, the authors derive an equation $h = 0.068 \times vd^2/D$, in which h is the column height per unit of mass transfer, v is the vapour velocity, d the column diameter and D the diffusion coefficient. This equation is equivalent to $h = 0.008 Re Pr$, where Re is the Reynolds no. and $Pr (= \eta/\rho D, \eta$ being the viscosity and ρ the vapour density) is the Prandtl no. The equation was tested for several mixtures with a high relative volatility and shown to hold for column diameters in the range 3-22 mm. and Reynolds no. between 200 and 800-1000. This result indicates that nearly all the resistance to mass transfer is in the gas phase.

II. At high vapour velocities (Reynolds no. 1000-15,000), the above results and those of other workers can be represented with fair accuracy by an equation $h = 11.1 d^{0.4} Re^{-0.2} Pr^{0.7}$. The systems tested were $C_6H_6-CCl_4$; $C_6H_6-C_2H_5Cl$; $n-C_7H_{16}$ -toluene; and $EtOH-H_2O$.

F. W. KIRKBRIDE.

Chem

3

11008

RM

SUBJECT USSR / PHYSICS
AUTHOR AEROV, M.E., UMNİK, N.N.
TITLE The Heat- and Mass Transfer in a Granular Layer. I.
PERIODICAL Žurn.techn.fis, 26, fasc. 6, 1233-1242 (1956)
Issued: 7 / 1956 reviewed: 10 / 1956

CARD 1 / 2

PA - 1348

Here the heat- and mass transfer in a layer of geometrically regular grains with not too small linear dimensions is investigated. The apparatus used for measuring consists of a cylindrical tube of 100 mm diameter, and the gas is introduced from the bottom to the top. The coefficient of the mass transfer was determined from the reduction of the weight of the elements of the filling which were made of naphtalene. These elements, which, as regards form and dimensions, are quite similar to other grains of the filling which were not made of non-sublimating material, are arranged in one or two rows in the upper half of the filling. The production of the grains made of naphtalene and the order in which tests were carried out is described.

Next, the naphtalene content in the gases which corresponds to the equilibrium is measured. Apparatus and carrying out of the test are described on the basis of a drawing. The dependence of the logarithm of the partial pressure p^* prevailing in the state of equilibrium on $1/T$ (T - absolute temperature) is characterized by straight lines having the same inclination. The sublimation heat of the naphtalene, which was computed from this inclination, amounts to ~ 129 kal/kg, which is 10% less than the sublimation heat in the vacuum.

The diffusion coefficient of the naphtalene vapors diffused into the gas was de-

Zurn.techn.fis, 26, fasc.6, 1233-1242 (1956) CARD 2 / 2 PA - 1348

terminated experimentally from the data concerning the evaporation of the naphtalene into a laminary flow in a short section of the tube. The measuring device is discussed in detail. The average values of the diffusion coefficient for air and hydrogen are shown in a table; for air they agree well with theoretical values, but in the case of hydrogen the experimental diffusion coefficient is 43% below the value computed by the equation of SHERWOOD and E.R.GILLILAND, Ind.Eng.Chem. 26, 681 (1934).

The critical numbers found on the occasion of the final treatment of experimental results by NUSSELT as well as by PRANDTL, SCHMIDT, and REYNOLD for the granular layer are explicitly given. In the interval $Re = 0,2 - 2000$, 31 tests undertaken with hydrogen and 99 with air overlap one another to a univocal dependence with an average scattering of + 8% and 20% on the occasion of tests with air and hydrogen respectively. According to the character of the dependence of the ratio (Nusselt number / cubic root of the product of PRANDTL'S and SCHMIDT'S numbers) on the REYNOLD number three different kinds of mass transfer may be distinguished.

INSTITUTION:

PA - 1349

CARD 1 / 2

SUBJECT
AUTHOR
TITLE
PERIODICAL

USSR / PHYSICS

AEROV, M.E., UMNIK, N.N.

The Heat- and Mass Transfer in a Granular Layer. II.
Zhurn.techn.fis, 26, fasc. 6, 1243-1250 (1956)
Issued: 7 / 1956 reviewed: 10 / 1956

At first the authors compare their results in detail with those obtained by foreign authors. Next, the heat transfer of a layer of grains is compared with the heat transfer in a chessboard-like arranged bundle of tubes with a flow passing vertically through them. Agreement is tolerably good. There follows a discussion of the heat- and mass transfer to a sphere and a cylinder in a granular layer and in a free flow. The NUSSELT number for a single sphere tends towards two if the REYNOLD number is reduced; on the occasion of the heat transfer of the sphere in the layer this boundary value is apparently much lower and the NUSSELT number in the interval $Re_c = 12$ to $4 Nu$ still depends considerably on Re . The NUSSELT number for a cylinder with a transversal flow round it tends towards the constant value $1/\pi$ if the REYNOLD number is reduced.

Discussion of results: The general assumptions made by Z.F. CUCHANOV, Izv. Akad. Nauk, Otdel. techn. nauk, No 10, 1341 (1947) with respect to the thermal conditions in a granular layer are confirmed by the present investigation. Thus the motion of the gas, at least at $Re_c > 50$, is to be considered as an "exterior problem". However, the relations mentioned by CUCHANOV are not in agreement with the results obtained by many works published later, and various

UMNIK, N. N.

USSR/Chemistry - Chemical technology

Card 1/1 Pub. 22 - 26/43

Authors : Malyusov, V. A.; Umnik, N. N.; and Zhavoronkov, N. M., Memb. Corr., AN SSSR

Title : Rectification in columns with a rotating rotor

Periodical : Dok. AN SSSR 106/1, 99-102, Jan 1, 1956

Abstract : The effect of basic rectification factors - rate of rotor rotation, rate of flow, physico-chemical properties of the mixture and geometric duct dimensions - on the rate of mass exchange in rectification columns was investigated with such mixtures as benzene-dichloroethane, benzene-carbon tetrachloride, chlorobenzene-ethylbenzene and ethyl alcohol-water. The results obtained are given in graphs. Ten references: 4 USSR, 4 Erg., and 2 USA (1938-1955). Table; graphs.

Institution : Scient. Res. Physicochemical Inst. im. L. Ya. Karpov

Submitted : July 1, 1955

Umnik, N.N.

K-1

USSR/Processes and Equipment for Chemical Industries -
Processes and Apparatus for Chemical Technology

Abs Jour : Referat Zhur - Khimiya, No 9, 1957, 33268

Author : Malyusov, V.A., Umnik, N.N., Malafeyev, N.A., Zhavoronkov,
N.M.

Inst : Academy of Sciences USSR

Title : Molecular Rectification.

Orig Pub : Dokl. AN SSSR, 1956, 109, No 4, 828-831

Abstract : Description of a molecular rectification method for the se-
paration of unstable mixtures into individual components.
The experiments were conducted with a 37-step molecular
still of the stairway type; the initial mixture was fed
to the 19-th step of the apparatus. Separation was effec-
ted of the binary mixtures octoil - octoil 8 (I-II) and
dibutyl phthalate - dibutyl azelate (III-IV). It was

...icien-
...the multi-
...er other molecu-

Card 1/2

U. S. AIR FORCE

MALYUSOV, V.A.; UMNIK, N.N.; ZHAVORONKOV, N.M.

Investigating and designing multistage columns for molecular
distillation. Khim. prom. no.5:296-302 J1-Ag '58. (MIRA 11:9)
(Distillation apparatus)

28(5)

SOV/32-25-5-46/56

AUTHORS:

Malyusov, V. A., Malafeyev, N. A., Umnik, N. N., Glazunov, D. N.
Belin, B. S.

TITLE: :

Multistage Column for Molecular Distillation (Mnogostupen-
chataya kolonna dlya molekulyarnoy distillyatsii)

PERIODICAL:

Zavodskaya Laboratoriya, 1959, Vol 25, Nr 5, pp 629-630 (USSR)

ABSTRACT:

A multistage horizontal column of glass with a metallic condenser was constructed and tested (Fig 1). The lower part of the column is divided into individual step-like segments; each segment contains a small shovel blade set up at an angle of 45° which acts as a condenser for each individual segment. The vacuum unit consists of a rough-vacuum oil pump of the type VN-461-M and a diffusion oil pump of the type MM-40-AM. The column was tested with binary mixtures of octoyle-octoyle S and dibutylphthalate-dibutylacelate. The efficiency of the column depends on the charging and the dimension of the step-like segments and increases with the length of the column. With a medium charge of $7-10 \text{ g/cm}^2$, columns with step-like segments 17 mm long have an efficiency of 0.5, columns with step-like segments 34 mm long an efficiency of 0.6. The diagram shows the distillation of a quaternary mixture in a column with 11 step-like segments (Fig 2). There are 2 figures and 1 Soviet reference.

Card 1/2

SOV/32-25-5-46/56

Multistage Column for Molecular Distillation

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im.
L. Ya. Karpova (Scientific Research Institute of Physical
Chemistry imeni L. Ya. Karpev)

Card 2/2

MALYUSOV, V.A.; UMNIK, N.N.; ZHAVORONKOV, N.M.

Separation of semiproducts in the synthesis of vitamin A by vacuum rectification and molecular distillation. Med.prom. 14 no.11:27-33 N °60. (MIRA. 13:11)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut imeni L.Ya.Karpova.
(VITAMINS--A)

MALAFEYEV, N.A.; MALYUSOV, V.A.; URSHIK, N.N.; PODGORNAYA, I.V.; ZHAVORONKOV,
N.K.

Saturated vapor pressure of tetrachloroalkanes at low temperatures.
Dokl. AN SSSR 135 no.3:659-662 N '60. (MIRA 13:12)

1. Fiziko-khimicheskiy institut im. L.Ya. Karpova. 2. Chlen-korres-
pondent AN SSSR (for Zhavoronkov).
(Paraffins) (Vapor pressure)

UMNIK, N. N., SHAVORONKOV, N. M., MALYUSOV, V. A., MALAFEYEV, N. A. & ORLOV, V. YU.

"Uterschung uber der Trenneg der Isotope des Lithiums durch Molekulardestillation."

Report presented at the 2nd Conf. on Stable Isotopes.
East German Academy of Sciences, Inst. for Applied Physical Material.
Leipzig, GDR, 30 Oct - 4 Nov 1961

MALAFEYEV, N.A.; MALYUSOV, V.A.; UMNIK, N.N.; SAKODYNSKIY, K.I.; ZHAVORNOKOV,
N.M. Primali uchastiye: PODGORNAYA, I.V.; ABRAMOVA, V.P.; BARANOVA, V.I.

Determination of the fractionation factors of binary mixtures
tetrachloroalkanes during vaporization in a high vacuum. *Khim.prom.*
no.3:196-198 Mr '61. (MIRA 14:3)
(Paraffins) (Distillation, Fractional)

MALYUSOV, V.A.; ORLOV, V.Yu.; MALAFEYEV, N.A.; UMNIK, N.N.;
ZHAVORONKOV, N.M.

Separation of lithium isotopes by the method of molecular
distillation of liquid lithium. Atom.energ. 11 no.5:435-439
N '61. (MIRA 14:10)
(Lithium—Isotopes)

SAKODYNSKIY, K.I.; UMNIK, N.N.

Analysis of binary mixtures of tetrachloroalkanes. Zhur.anal.
Khim. 16 no.3:375-376 My-Je '61. (MIRA 14:6)

I. L. Ya. Karpov Scientific Research Physico-Chemical Institute,
Moscow.

(Paraffins)

lit. 1/28

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PHASE I BOOK EXPLOITATION

SOV/6246

Soveshchaniye po tseolitam. 1st, Leningrad, 1961.

Sinteticheskiye tseolity; polucheniye, issledovaniye i primeneniye (Synthetic Zeolites: Production, Investigation, and Use). Moscow, Izd-vo AN SSSR, 1962. 286 p. (Series: Its: Doklady) Errata slip inserted. 2500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Komisiya po tseolitam.

Resp. Eds.: M. M. Dubinin, Academician and V. V. Serpinskiy, Doctor of Chemical-Sciences; Ed.: Ye. G. Zhukovskaya; Tech. Ed.: S. P. Golub'.

PURPOSE: This book is intended for scientists and engineers engaged in the production of synthetic zeolites (molecular sieves), and for chemists in general.

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